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PRELIMINARY RESULTS OF COMPLEX ENVIRONMENTAL INVESTIGATIONS IN HERMANNLOCH ADIT IN JANOWIEC - ABIOTIC COMPONENTS

geological documentation, historic adit, chemical analysis, Janowiec, Bardo Mts.

Preliminary results of specialized environmental studies of a small adit called *Hermannloch*, located in Janowiec near Bardo Śląskie (Lower Silesia, Poland) are discussed. These investigations include the chemical analysis of bedrock and water accumulating on the mine's floor and air. Furthermore the pH and hardness of water as well as the temperature and humidity of the air are determined. These studies are an element of the first comprehensive, interdisciplinary recognition of former underground mining object in Lower Silesia.

The bedrock has a fairly constant chemical composition, regardless of the type of rocks studied (shale and material filling the tectonic zone). The predominant components are silica (approx. 62–67%) and alumina (approx. 14,5–17%), significant trace elements are Ba, Zr, Zn, Sr, Rb, and Cr. Calcium-sulfate-bicarbonate water, of medium hardness and pH at the level of 7,5 stagnates in the adit. The composition of the atmosphere in the mine does not differ from the average composition of the air. There is no presence of hydrogen sulphide.